

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As [a] below named inventor(s), I/we hereby declare that:

My/our residence, post office address and citizenship is/are as stated below next to my/our name(s).

I/we believe I/we am/are an/the original, first and sole/joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:
COMPARATIVE GENOMIC HYBRIDIZATION (CGH) the specification of which

_____ is attached hereto.

X was filed on November 27, 1997 as
Application Serial Number 08/565,304
and was amended on July 5, 1996, March 5, 1997, and April 13, 1998.

I/We hereby state that I/we have reviewed and understand the contents of the above-identified specification, including the claims as amended by any amendment referred to above.

I/We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I/We hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate, listed below and so identified, and I/we have also identified below any foreign application for patent or inventor's certificate on this invention filed by me/us or my/our legal representatives or assigns and having a filing date before that of the application on which priority is claimed.

| Number | Country | Day/Month/ Year Filed | Priority Claimed - Yes or No |
|--------|---------|--------------------------|---------------------------------|
| | | | |
| | | | |

I/We hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I/we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

| Application Serial No. | Filing Date | Status |
|------------------------|------------------|-----------|
| 08/223,905 | April 6, 1994 | Abandoned |
| 08/132,172 | October 6, 1993 | Abandoned |
| 07/969,948 | October 20, 1992 | Abandoned |
| 07/846,659 | March 4, 1992 | Abandoned |

I/We hereby declare that all statements made herein of my/our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I/We hereby appoint the following attorneys and agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith and request that all correspondence and telephone calls with respect to this application be directed to McCUTCHEN, DOYLE, BROWN & ENERSEN, LLP Three Embarcadero Center, San Francisco, California 94111, Telephone No. (415) 393-2000:

| Attorney | Registration No. |
|-------------------------|------------------|
| Nina K. Srejovic | 40,342 |
| Michael Shuster | 41,310 |
| J. David Hadden | 40,629 |
| William E. Thomson, Jr. | 20,719 |
| Robert H. Lee | 42,790 |
| Emily M. Haliday | 38,903 |
| Richard Wawrzyniak | 36,048 |
| Carol M. Gruppi | 37,341 |
| Andrew Kumamoto | 40,690 |

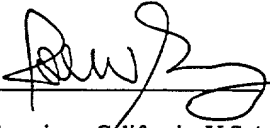
Full name of
first inventor: Daniel Pinkel

Inventor's signature: _____ Date: _____

Residence and Post Office Address: Walnut Creek, California, U.S.A.
31 Manzanita Court, Walnut Creek, California 94595, U.S.A.

Citizenship: United States

Full name of second inventor: Joe W. Gray

Inventor's signature:  Date: 11/16/98

Residence and Post Office Address: San Francisco, California, U.S.A.
50 Santa Paula Avenue, San Francisco, California 94127, U.S.A.

Citizenship: United States

Full name of third joint inventor: Anne Kallioniemi

Inventor's signature: _____ Date: _____

Residence and Post Office Address: Rockville, Maryland, U.S.A.
1083 Grand Oak Way, Rockville, Maryland 20852

Citizenship: Finland

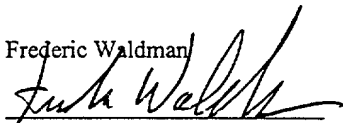
Full name of fourth joint inventor: Ollie-Pekka Kallioniemi

Inventor's signature: _____ Date: _____

Residence and Post Office Address: Rockville, Maryland, U.S.A.
1083 Grand Oak Way, Rockville, Maryland 20852

Citizenship: Finland

Full name of fifth joint inventor: Frederic Waldman

Inventor's signature:  Date: 11-13-98

Residence and Post Office Address: San Francisco, California, U.S.A.
206 Edgewood Avenue, San Francisco, California, U.S.A., 94117

Citizenship: United States

0091318-02404

Full name of
sixth joint inventor:

Masaru Sakamoto

Inventor's signature:

Date: _____

Residence and Post
Office Address:

Tokyo, Japan
1-8, Kanda Surugadai, Chiyoda-ku, Tokyo 101-0062, Japan

Citizenship:

Japan

09013318.072404
T04220"BTBET660

**DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION**

As [a] below named inventor(s), I/we hereby declare that:

My/our residence, post office address and citizenship is/are as stated below next to my/our name(s).

I/we believe I/we am/are an/the original, first and sole/joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:
COMPARATIVE GENOMIC HYBRIDIZATION (CGH) the specification of which

_____ is attached hereto.

X was filed on November 27, 1997 as
Application Serial Number 08/565,304
and was amended on July 5, 1996, March 5, 1997, and April 13, 1998.

I/We hereby state that I/we have reviewed and understand the contents of the above-identified specification, including the claims as amended by any amendment referred to above.

I/We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I/We hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate, listed below and so identified, and I/we have also identified below any foreign application for patent or inventor's certificate on this invention filed by me/us or my/our legal representatives or assigns and having a filing date before that of the application on which priority is claimed.

| Number | Country | Day/Month/ Year Filed | Priority Claimed - Yes or No |
|--------|---------|--------------------------|---------------------------------|
| | | | |
| | | | |

I/We hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I/we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

| Application Serial No. | Filing Date | Status |
|------------------------|------------------|-----------|
| 08/223,905 | April 6, 1994 | Abandoned |
| 08/132,172 | October 6, 1993 | Abandoned |
| 07/969,948 | October 20, 1992 | Abandoned |
| 07/846,659 | March 4, 1992 | Abandoned |

I/We hereby declare that all statements made herein of my/our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


I/We hereby appoint the following attorneys and agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith and request that all correspondence and telephone calls with respect to this application be directed to McCUTCHEN, DOYLE, BROWN & ENERSEN, LLP Three Embarcadero Center, San Francisco, California 94111, Telephone No. (415) 393-2000:

| Attorney | Registration No. |
|-------------------------|------------------|
| Nina K. Srejovic | 40,342 |
| Michael Shuster | 41,310 |
| J. David Hadden | 40,629 |
| William E. Thomson, Jr. | 20,719 |
| Robert H. Lee | 42,790 |
| Emily M. Haliday | 38,903 |
| Richard Wawrzyniak | 36,048 |
| Carol M. Gruppi | 37,341 |
| Andrew Kumamoto | 40,690 |

Full name of
first inventor:

Daniel Pinkel

Inventor's signature:



Date: 11-13-98

Residence and Post
Office Address:

Walnut Creek, California, U.S.A.
31 Manzanita Court, Walnut Creek, California 94595, U.S.A.

Citizenship:

United States

Full name of
second inventor: Joe W. Gray

Inventor's signature: _____ Date: _____

Residence and Post
Office Address: San Francisco, California, U.S.A.
50 Santa Paula Avenue, San Francisco, California 94127, U.S.A.

Citizenship: United States

Full name of
third joint inventor: Anne Kallioniemi

Inventor's signature: Anne Kallioniemi Date: 11-25-98

Residence and Post
Office Address: Rockville, Maryland, U.S.A.
1083 Grand Oak Way, Rockville, Maryland 20852

Citizenship: Finland

Full name of
fourth joint inventor: Ollie-Pekka Kallioniemi

Inventor's signature: [Signature] Date: 11-25-98

Residence and Post
Office Address: Rockville, Maryland, U.S.A.
1083 Grand Oak Way, Rockville, Maryland 20852

Citizenship: Finland

Full name of
fifth joint inventor: Frederic Waldman

Inventor's signature: _____ Date: _____

Residence and Post
Office Address: San Francisco, California, U.S.A.
206 Edgewood Avenue, San Francisco, California, U.S.A., 94117

Citizenship: United States

09942348-072401

COPY FROM PARENT

Full name of
sixth joint inventor:

Masaru Sakamoto

Inventor's signature:



Date: November 17, 1998

Residence and Post
Office Address:

Tokyo, Japan

1-8, Kanda Surugadai, Chiyoda-ku, Tokyo 101-0062, Japan

Citizenship:

Japan

09943318-072404

COPY FROM PARENT

I hereby certify that this correspondence is being
deposited with the United States Postal Service
first class mail in an envelope addressed to:
Assistant Commissioner for Patents, 4-27-01
Washington, D.C. 20231, on

LAW OFFICES OF JONATHAN ALAN QUINE

By

Evelyn G. Smy

Attorney Docket No. 407E-914025US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent/application of:

Patent No.:

Application No.: 09/311,835

Filed:

For: Comparative Genomic Hybridization
(CGH)

APPOINTMENT OF ASSOCIATE
ATTORNEY

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

I hereby appoint the attorneys and agents at Customer Number 22798 to prosecute
this application and transact all business in the Patent and Trademark Office connected
therewith. The attorneys and agents at Customer Number 22798 include:

Jonathan Alan Quine, Ph.D., Reg. No. 41,261; Stacy Landry, Ph.D., Reg. No.
42,779; Christopher C. Sappenfield, Reg. No. 45,073; Gwynedd Warren, Reg. No. 45,200;
Angela P. Horne, Reg. No. 41,079, Stephen J. LeBlanc, Reg. No. 36,579, Tom Hunter, Ph.D.,
Reg. No. 38,498, and Emily Haliday, Ph.D., Reg. No. 38,903.

Patent No.:

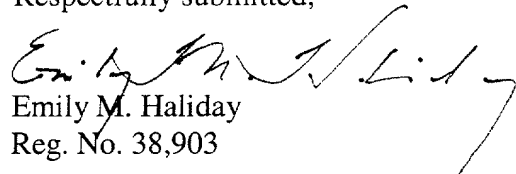
Application No.: 09/311,835

Page 2

Please direct all future correspondence regarding the subject application to
CUSTOMER NUMBER 22798, that is:

LAW OFFICES OF JONATHAN ALAN QUINE
P.O. BOX 458
Alameda, CA 94501
(510) 337-7871/Fax (510) 337-7877

Respectfully submitted,


Emily M. Haliday
Reg. No. 38,903

LAW OFFICES OF JONATHAN ALAN QUINE
P.O. BOX 458
Alameda, CA 94501
(510) 337-7871
Fax (510) 337-7877

09/311,835-072401

ASSIGNMENTU.C. Case No 92-005-3

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

- | | |
|---------------------|---------------------------|
| 1. Daniel Pinkel | 2. Joe W. Gray |
| 3. Anne Kallioniemi | 4. Olli-Pekka Kallioniemi |
| 5. Frederic Waldman | 6. Masaru Sakamoto |

hereby sells, assigns and transfers to ASSIGNEE, The Regents of the University of California, a California Corporation, having its statewide administrative offices located 300 Lakeside Drive, 22nd Fl., Oakland, CA 94612-3550, and the successors, assigns and legal representatives of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in the invention entitled:

COMPARATIVE GENOMIC HYBRIDIZATION (CGH)

and which is found in

- (a) _____ U.S. patent application executed on _____, entitled as above and listing the above named persons as inventors
- (b) X U.S. application serial no. 08/223,905, filed on April 6, 1994
- (c) _____ U.S. Patent No.: _____, issued _____

and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

099122818, 072404

REEL 7180 FRAME 837

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, The Regents of the University of California.

executed this

15 day of July, 1994

15 day of July, 1994

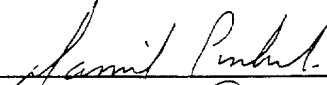
15 day of July, 1994


____ day of _____, 19____

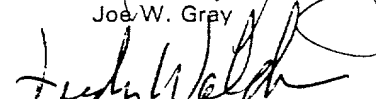
____ day of _____, 19____

____ day of _____, 19____

Signature of Inventor(s)


Daniel Pinkel


Joe W. Gray


Frederic Waldman

09913313 072404

REEL 7180 FRAME 838

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, The Regents of the University of California.

executed this

19th day of July, 1994

19th day of July, 1994

____ day of _____, 19____

____ day of _____, 19____

____ day of _____, 19____

____ day of _____, 19____

Signature of Inventor(s)

Anne Kallioniemi
Anne Kallioniemi

Olli-Pekka Kallioniemi
Olli-Pekka Kallioniemi

00042848 072401

REF 180 1811839

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, The Regents of the University of California.

executed this

22nd day of July, 1994

Signature of Inventor(s)


Masaru Sakamoto

____ day of _____, 19____

____ day of _____, 19____

____ day of _____, 19____

____ day of _____, 19____

____ day of _____, 19____

09912818-072401

REL 7180 FRAM 840

RECORDED
PATENT & TRADEMARK OFFICE

AUG 10 94